## MISCELLANEOUS NOTES

## 1. LONGEVITY IN ELEPHANTS

In connection with a recent note of Mr. N. G. Pillai's relating to the age of elephants (J.B.N.H.S. 48: 356), I have a recollection of reading that the elephant ridden by the Prince of Wales (later Edward VII) in 1876 in Delhi was the same as was used in 1803 by Lord Lake in his triumphal entry into the Imperial Mogul-Maratha capital. Is this a fact?
‘Southwood', Mussorie, U.P.
HAMID A. ALI roth November, 1949.

## 2. WILD ELEPHANTS DYING IN ASSAM

In August and September 1949 some brief reports appeared in the press of wild elephants dying in the North Cachar Hills of Assam. I immediately made enquiries, and thanks to the co-operation extended to me by Mr. P. D. Stracey, Senior Conservator of Forests, and Mr. M. N. Pait, Divisional Forest Officer of Nowgong District, I am able briefly to give a few facts about the case.

The epidemic apparently started about the first week of June, and lasted up to the second week of July. There was a spell of hot weather during this period. The area affected was the LangtingMupa Reserved forest and the strip of Unclassed State Forest to the east of it, an area of some 20 miles by 15 miles to the south of Lumding railway station.

A fair number of tusks of tuskers and tushes of makhnas and females have been brought in, and the latest estimate of the D.F.O. of Nowgong is that approximately 55 elephants must have died. It is believed that two or three herds were affected, and that mortality was greatest among the younger animals. The carcases of the dead elephants were found chiefly in nine different places inside the area referred to above. There is no news of any other wild animals such as deer or bison having died.

The epidemic is believed to have been anthrax, but unfortunately there is no proof, as no vet seems to have been available at the time. In the early part of June there was an outbreak of the epidemic at two villages to the east of Langting station, with heavy loss of domestic buffaloes. It is not known if the elephants nearby contracted the disease from the buffaloes, or vice versa.

It is an extraordinary thing that ten years ago a similar epidemic occurred in the North Cachar Hills, in which elephants, bison and sambar are reported to have died in considerable numbers in the upper Kopili area of Garampani. Some 29 elephant tusks were recovered from a comparatively small area round the hot springs. The epidemic raged from April 1939 till. September of that year, and
the large herds of bison of the Krunming Reserve were said to have been practically wiped out. The Sub-Divisional Officer of the North Cachar Hills at that time tells me that the disease seems to have been a form of rinderpest, but that there is no accurate information on the point. Other such epidemics have taken place in Assam, such as in the Kochugaon Forest of Goalpara District in 1933, when some 20 bison are reported to have died, and in Kaziranga Game Sanctuary in 1947, when 14 carcases of rhino were picked up (many more may have died, and no trace of them found).

An enquiry is to be held in the North Cachar Hills in the near future, and it is to be hoped that more information will become available. In the meantime all elephant catching operations in that particular district have been cancelled.

Doyang T.E.
Oating P.O., Assam, E. P. GEE ${ }^{25}$ th December, 1949.

## 3. A BULL BISON'S ABNORMAL BEHAVIOUR

On returning to my estate after 5 days' absence, on the 14 th December I was informed that a large solitary bull bison had visited my cart-bulls shed (surrounded by coffee) on the 13th and 14th, demonstrating at the graziers. On the 15 th I received word that the same bull was grazing in my new coffee clearings, and again showing hostility to the graziers on the grass slope nearby. On arriving at the place I, sure enough, found the bull on the borders of the new clearing and, on seeing me the bison at once walked towards me in a most menacing manner. There was little doubt as to his intentions and I shot it; a large brute, blind in one eye (the eye was missing). It is just possible this may have accounted for his ill-temper and curious behaviour.

Honnametti Estate,
Attikan P.O., Via Mysore (S. India) RANDOLPH C. MORRIS 20th December, 1949.

## 4. THE LARGE RED FLYING SQUIRREL—PTEROMYS INORNATUS GEOFFROY

Not much seems to be on record concerning the life and habits of this squirrel. Early in my service from the year i890 onwards I held charge of the Jaunsar Forest Division, with Chakrata as my head-quarters. My charge included the leased forests of Tehri Garhwal in Tons valley from its junction with the Jumna river at 1,000 feet altitude up to about 13,000 feet. The forests were mostly coniferous. At low levels there were extensive areas covered with the Chir Pine ( $P$. longifolia). Above 5,00o feet came the Blue Pine
( $P$. excelsa) mixed with oaks of two kinds and from 7,000 feet up to about 9,ooo feet, Deodars, spruce firs and silver firs predominated, with the high level Karshu Oak. Above ıo,000 feet the forest growth consisted of the high level silver fir, birch and rhododendron, etc.

The flying squirrel was not rare throughout this area. In the summer months they frequented the fir and oak forests between 7,000 and 9,000 feet. They are nocturnal in their habits but in undisturbed forest may often be seen on the move in the dusk after sunset. They are, however, more often heard than seen, the cry being a rather loud, penetrating and drawn-out whine.

The only nests I found were similar to the English squirrel's dray, a nest as big as that of a crow made of sticks and vegetable matter. They have one young only.

A young one taken by me in May from a nest in a spruce fir about 30 feet from the ground was unfortunately hardly old enough to survive, and in spite of artificial feeding it died in a few days.

Their food consists I believe entirely of seeds chiefly acorns and other fruits and leaves. They will take long flights, if necessary, by gliding down the mountain side.

On one occasion I was standing in open fir forest near a forest rest house at Deota. It was growing dusk. Suddenly I noticed a flying squirrel sitting motionless on an excrescence from a spruce fir about 2 feet from the ground. The animal was watching me and evidently thought itself safe as it had the tree trunk at its back, up which it could disappear if necessary. I began to advance on the squirrel very gradually and the animal seemed to think all was well. When only about 3 or 4 feet off I sprung forward and managed to seize it in both hands as it endeavoured to run up the trunk of the tree. I gripped her firmly and managed to avoid being bitten. I took her up to the house and put her in a strong basket with a lid for the night. In the morning I found she had eaten her way out of the basket and was loose in the room. I captured her and took her out intending to make her climb a tree and see how far she would glide. There was no difficulty in inducing her climb up a small spruce tree about 30 feet high. The tree was near the head of a fairly steep valley leading down from 7,500 feet (Deota) to the Tons river at 3,500 feet. I now endeavoured to persuade her to take off. She refused for some time but eventually gave in. I expected her to fly perhaps 100 feet or so and to alight on some big tree below, but to my surprise she glided away right down the steep valley. She was visible for only about ioo yards when the valley curved. When I last saw her she showed no signs of alighting and I imagine she may have continued her downward course for a very long away. She was doubtless scared and wanted to put a considerable distance between herself and her enemy.

In the year 1892 I was iiving in Naini Tal. During my stay there, a forest working-man brought me a young flying squirrel. It seemed to be nearly full grown and was in good health. I was leaving for England in a month or so, so I made arrangements to take her (for she was a female) with me. I had a cage made and in due course started off for Bombay with the squirrel in the cage and with a small sack of apples.

The squirrel was very fond of apples and fed well on the journey but felt the heat (it was July) intensely. I gave her a big lump of ice in her cage which she much appreciated. Eventually I got her safely on board ship and she survived the voyage and arrived at my home in Sussex in very good condition. At first we housed her in a small room in the tower above the house but she was not very happy there, so she was relegated to an old glass house-a fernery where she had lots of room. She lived in this house for over a year being fed on apples, nuts, pie crust and other fruits.

In the meantime I had to return to India and my mother took her in charge. She fed her every day.

When I returned two years later she was still in good health and fairly friendly. One evening in July we heard her calling in the park. We ultimately traced her to a big oak tree. On examining the fernery we discovered a hole in the roof through which she had evidently been in the habit of going out every night to feed on apples or acorns, and then returning in the early morning. We did not block up the hole and she returned as before. For some time she continued her nocturnal visits to the park and garden and eventually she strayed away and was ultimately found dead in Petworth, 4 miles away, probably shot by some 'sportsman'. Had we had a pair of these squirrels I feel sure they would have done well and probably would have bred, but I am inclined to think they could not survive the winter in England unless fed, as I do not think they store up food in autumn.

There is another large red flying squirrel which occurs in the submontane sal forests of the tract from Jumna to Nepal. I saw it on several occasions and it seemed to me to be exactly similar to the one above described. The only one I saw at close quarters was when I was sitting up in a machan in the Bahraich sal forest. There was a tiger kill under my machan and I was keeping very quiet as the time had come when the tiger should return. Suddenly there was some smack on the tree just above my head not 2 feet away where a flying squirrel had alighted having doubtless glided down from some distant tree. It gave me a jump! I do not remember if the tiger returned or not.

It would be interesting to ascertain if this large flying squirrel which inhabits the submountane sal forest is, or is not, the same as the high level Himalayan species. Possibly the Bombay Natural History Society may have specimens from both localities and could settle the question?
if. Banbury Road, Oxford,

B. B. OSMASTON 28th November, 1949.

## 5. SCENT

Some sportsmen are apt to underrate the power of scent possessed by certain animals. The tiger and the domestic cat are two instances.

In the article on the Indian Wild Dog published in the Society's Journal Vol. 41, No. 4, the writer remarked at page 710 that the
scenting power of the species is extraordinary as shown by the fact that the animals can follow a line in the hot weather when the ground is bone dry. They have been observed doing this during the hottest hours of the day when the temperature is around $110^{\circ}$ Fahrenheit.

This power of scent possessed by the Indian Wild Dog is superior to that of most domestic dogs; but that in exceptional instances the trained Alsatian dog can perhaps more than equal it is evidenced by the doings of 'Captain Hall', the Alsatian so named by the Egyptian Police after his former English owner. The dog was three years old when taken in hand, and though born of untrained parents took to the work at once and proved to be of amazing intelligence.

In his most interesting and informative book, 'Egyptian Service-1902-1946.' Sir Thomas Russell Pasha, к.в.е., C.m.g. relates how this dog, among many and remarkable cases, showed how he was able to follow a scent several days old, and even on a tarmac road over which motor cars had been passing for some hours after the scent had been laid.

In one case every detail was personally known by Sir Thomas Russell as the Senior Police Officer in close connection with the murder of his shikari, Guda. The dog Hall arrived with his handler four days after the murder, and having had his nose pressed down to the foot imprint of one of the three suspects picked the man out from a number of men lined up in two ranks for his inspection. He was then taken back to the place in the desert where the naked body of the murdered man had been buried by the murderers and repeated the process by detection of a second man in the identification parade; being once more taken to the graveside he repeated the feat by singling out the third suspect. Although the previous two were still in the ranks he passed them by and seized the third man.

The tracks from the village hamlet to the desert grave showed that a donkey had been used for conveyance of the corpse. The five days old back track from the grave to the village was followed by the dog which disregarded everyone of the many other overlying tracks and led the following party of police and others to the hut where the man had been strangled. For the first seven kilometres the ground was soft and still showed the track, but a kilometre from the desert edge sand and gravel gave way to flint and rock yet the astounding dog took the track over a mile of stony country, over ground fouled by the tracks of village flocks and herds and getting yet more foul as it approached the village. Slowly he puzzled out the line, took it half round by the outer wall of the hamlet, in and along the village street, sniffing at each door till he found the house he wanted when he gave tongue and demanded entrance.

This wonderful instance of power of scent and sagacity is here related with presumed permission of the distinguished author in whose book are also instances of the marvellous tracking powers of some Arabs. In Upper India also there are people who can perform very wonderful feats of tracking as is well known to the police of those parts of the country.

Bangalore,<br>November 1949.

R. W. BURTON,

Lieut.-Col. I.A (Retd.)

